

are recorded in *Lupinus* (*L. Brittoni*), *Amorpha* (*A. occidentalis*), *Ceanothus* (*C. austro-montanus*), and *Malacothamnus* (*M. Nuttallii*); and several new combinations are made. The work includes 375 recognized species, representing approximately 150 genera, distributed in 57 families. Whether or not we agree with the limitation of groups and the nomenclature in all cases is a matter of minor significance. It is a pleasure to state that the author has given us a work which will serve as an exceedingly helpful guide in studying the woody plants of southern California.—J. M. GREENMAN.

North American Flora.⁴—Volume III, part 1, contains a treatment of the Nectriaceae and Hypocreaceae by F. J. SEAVER, the Chaetomiaceae by H. L. PALLISER, and the Fimetiariaceae by D. GRIFFITHS and F. J. SEAVER. These four families are represented by 242 species which are referred to 45 genera. One new species is described in *Scoleonectria* (*S. tetraspora*), found growing on trunks of cacao in Jamaica, and four new species from eastern and central United States are added to *Chaetomium*.—J. M. GREENMAN.

Revision of Eucalyptus.—The recent issue of Volume II, part 2, continues MR. MAIDEN'S⁵ excellent revision of this genus. The present part contains descriptive matter relating to ten species and four full-page illustrations. This work can be used advantageously in conjunction with the "Forest flora of New South Wales" by the same author.—J. M. GREENMAN.

NOTES FOR STUDENTS

Cystidia of Coprinus.—BULLER⁶ has given an interesting account of his studies on the cystidia of *Coprinus atramentarius*. The lamellae of this species are very thin, broad, with parallel sides, and lie very close together. Because of their soft texture and extreme flexibility, many of them would lie very close together, or actually adhere, were it not for some kind of stay or prop for spacing them. The spores, then, which are shot off from the sterigmata could not fall down and out from the interlamellar spaces. The cystidia function as props to hold the lamellae equidistant. They are large cylindrical cells, with a slender stalk, which grow out from the subhymenium, the broad portion extending across the interlamellar space against the opposite gill surface or sometimes slightly entering it. They are $120-170 \times 20-30 \mu$, quite evenly distributed, there being about 75-100 on each square mm. of gill surface.

⁴ North American flora, Vol. III, part 1, pp. 1-88. New York Botanical Garden. December 29, 1910.

⁵ MAIDEN, J. H., A critical revision of the genus *Eucalyptus*, Vol. II, part 2, pp. 61-100, pls. 53-56. Sydney: William Applegate Gullick. 1910.

⁶ BULLER, A. H. R., The function and fate of the cystidia of *Coprinus atramentarius*, together with some general remarks on *Coprinus* fruit bodies. *Annals of Botany* 24:613-629. pls. 50, 51. 1910.